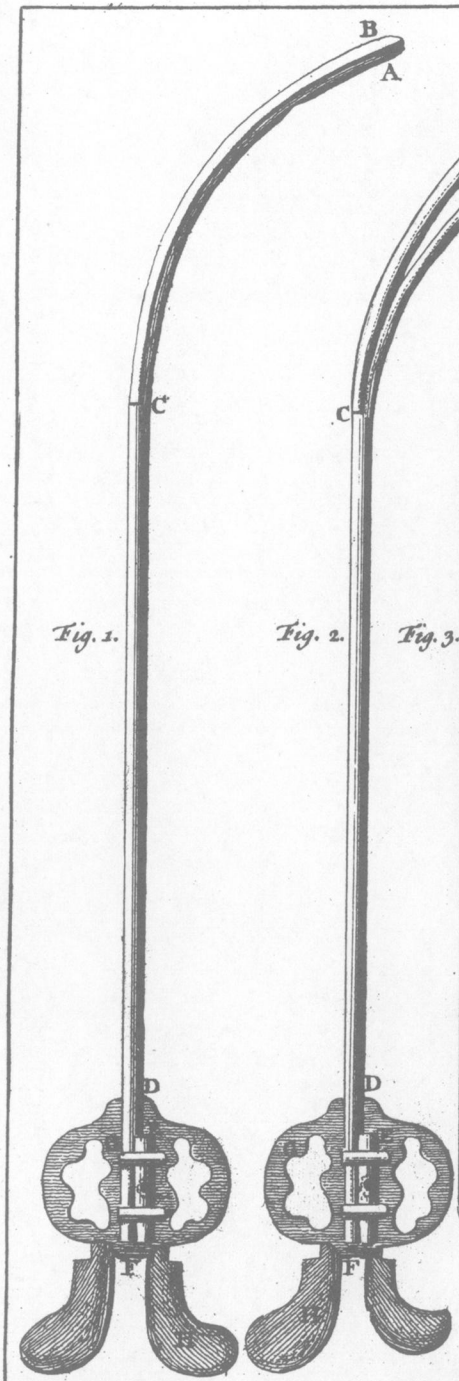

Fig. 1.

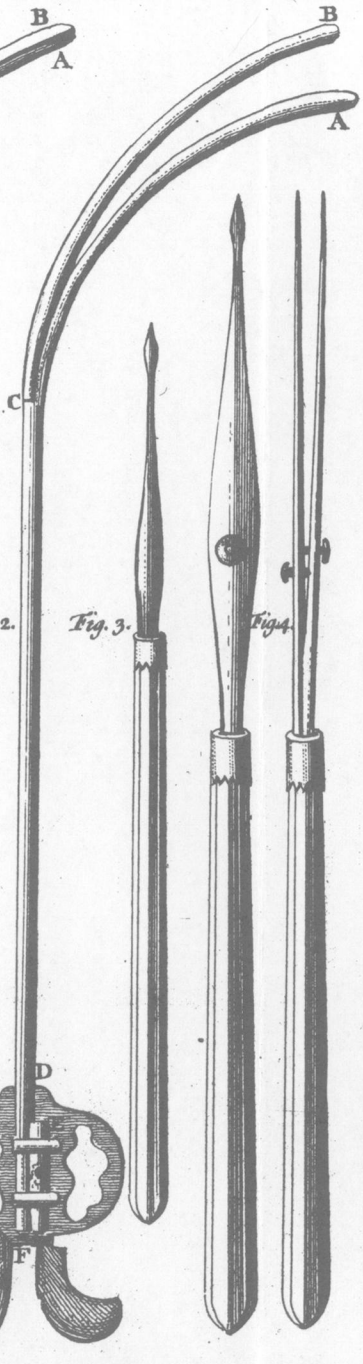

Fig. 2.

Fig. 3.

Fig. 4.

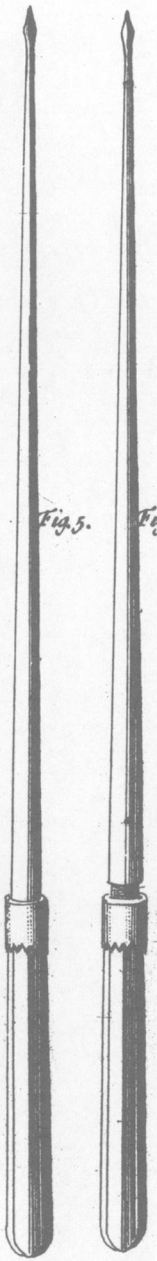

Fig. 5.

Fig. 6.

Fig. 7.

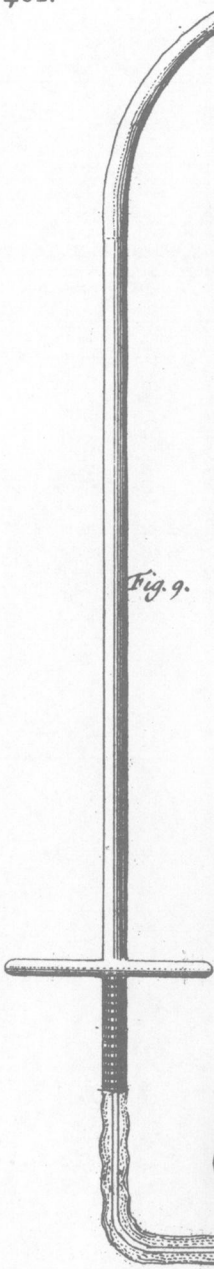

Fig. 9.

TAB. VII.

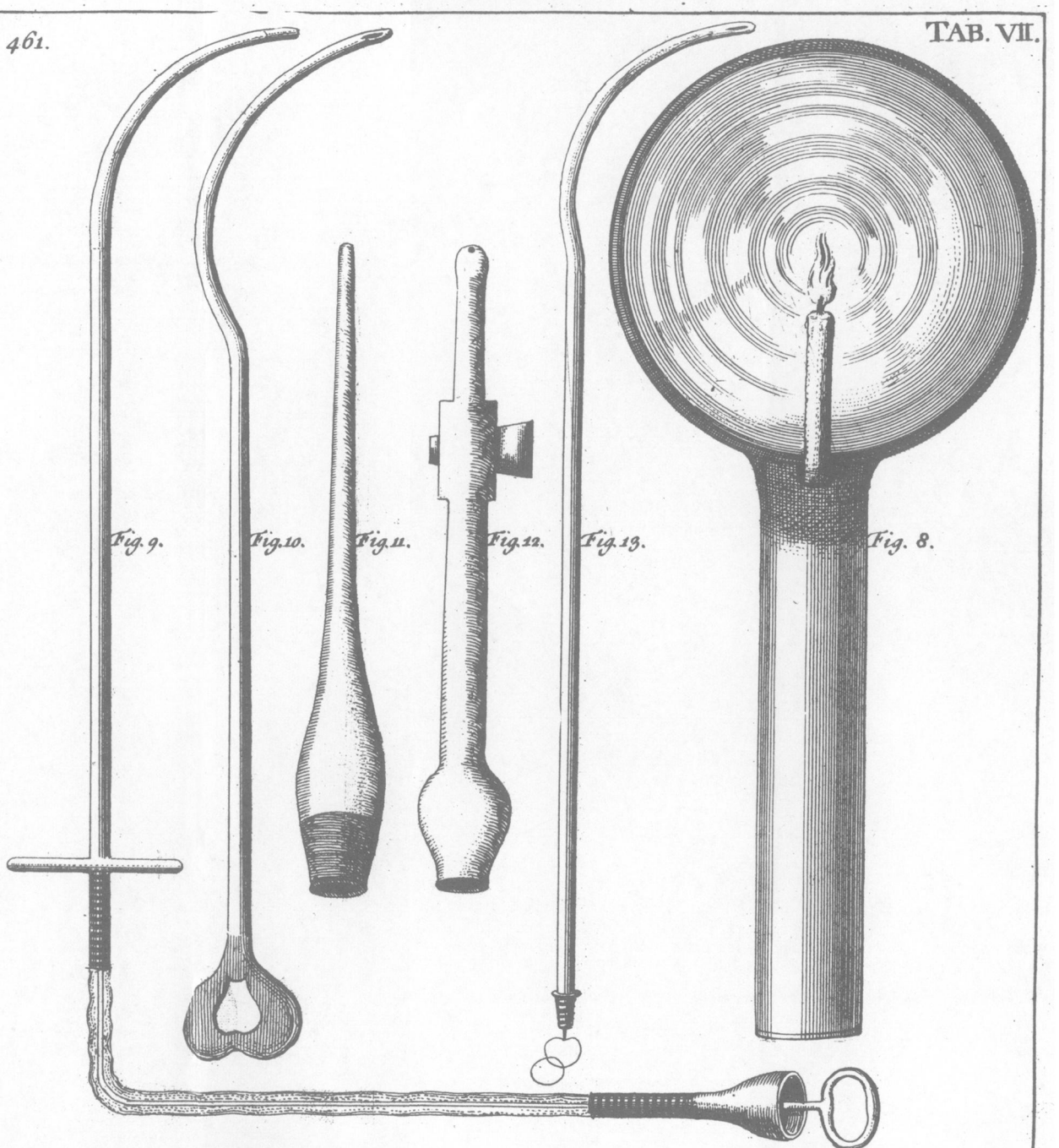

Fig. 9. Fig. 10. Fig. 11. Fig. 12. Fig. 13. Fig. 8.

J. Mynde sc.

XXVI. *A Deſcription of a* Catheter, *made to remedy the Inconveniencies which occaſioned the leaving off the* High Operation *for the* Stone; *by* Archibald Cleland, *Surgeon to General* Wade's *Regiment of* Horſe.

AS this Operation was left off very precipitately, in order to introduce that Method now called the *Lateral Operation*, which has been practiſed for ſome time with good Succeſs; notwithſtanding, had the Operators at that time had the Advantage of this Inſtrument I here offer to this Honourable SOCIETY, I am perſuaded the Advantage would have been more than equal in favour of this *High Operation*, and preferable to any other Method yet practiſed: And I humbly hope, that the Deſcription, and the Method of uſing this *Catheter*, will be a means of reviving an Operation ſo happily begun, and calculated for the Good of thoſe that are afflicted with the Stone in the Bladder.

This *Catheter* is made either of Silver or Steel, of different Sizes, to ſuit different Ages; and has the outward Appearance of a common *Catheter* [TAB. VII. *Fig.* 1.], and will anſwer the ſame Uſes: But, in reſpect to this Operation, it differs from the common in this, that it is compoſed of Two Legs [*Fig.* 2.], with blunt Points, a long Tube, a Sliding bolt; and a Handle, which ſerves to open and ſhut the Legs: The Bolt, which is fixed to the Extremity of the Tube, goes into Two Holes, fixed in the Plate of the Handle: The one

one ſerves to keep the Legs cloſe during the time it is to be introduced into the Bladder, the other to extend the Points at the Diſtance of an Inch or more, during the time the Operation is performing.

The Method of uſing this *Catheter* is, firſt, (after having taken the neceſſary Precautions, and filled the Bladder) to introduce the *Catheter* into the Bladder, then unbolt it at the Handle, and by holding the Tube in one Hand, and the Handle that moves the Legs in the other, then turn or open the Legs, till the Bolt becomes oppoſite to the Second Hole upon the Plate into which the Bolt muſt be thruſt; then by preſſing gently the Handle downwards betwixt the Patient's Legs, the Two blunt Points will be eaſily felt above the *Os Pubis*, in the Protuberance made by the Injection into the Bladder.

The Advantages I propoſe by uſing this Inſtrument, are theſe: Firſt, To be a Director for the Operator, in determining the Place where the Puncture is to be made in the Bladder; it alſo ſerves as a Support to the Bladder, when the Water flows out; and keeps it from ſubſiding during the Time of the Operation, and till the Stone is extracted: It ſerves likewiſe to reſiſt the Preſſure of the abdominal Muſcles and *Peritoneum*, and alſo hinders the *Inteſtines* from being forced down upon the Knife; and keeps the Orifice open, till the Stone or Stones are brought away. And, laſtly, by the Help of this Inſtrument it may be diſcovered, whether the Bladder is indurated or ſcirrhous.

The Method of performing this Operation, with Safety, is, after having introduced and fixed the *Catheter* with its Legs open, to feel for the Two Points

above the *Os Pubis*, and place the Finger and Thumb gently upon them; then give the Handle to an Aſſiſtant, to keep it firm in that Poſition; then, with the Knife in the Right Hand, make a Puncture at once into the Bladder, exactly in the Middle betwixt the Points; but, for the more Security, ſomewhat lower nearer the *Os Pubis*; and, without drawing out the Knife, make a large Inciſion downwards, inclining under the Arch of the *Pubis*, in proportion to the Bigneſs of the Stone, taking care not to wound the Cartilage that joins the Bones together, when the Knife is withdrawn: The Bladder being thus ſupported, the Stone may be extracted with the Fingers, or with a ſmall Pair of Tenets, there being little Danger of breaking it in this Method. When the Operation is finiſhed, raiſe the Handle of the *Catheter*, and unbolt it; ſhut it cloſe and fix it ſo; then withdraw the *Catheter*, and dreſs the Patient.

April 5. 1739.

See TAB. VII.

Fig. 1. *The* Catheter, *as it is to be introduced into the Bladder, the Two Legs* A *and* B *being cloſed together.*

Fig. 2. *The* Catheter, *its Two Legs* A, B, *being open.*

C, D, *The Tube.*

E, *The Sliding-bolt.*

F, *The Two Holes into which the Bolt is to be ſlid.*

G, *The Ears fixt to the Tube* C, D, *which is all of one Piece with the Leg* A.

H, *The Handle, which opens the Legs; this Handle is all of one Piece with the*

the Leg B, *which Leg* B *is a Continuation of a Wire, that runs through the Tube* C D, *and is faſtened to the Handle* H, *and turns with it.*

XXVII. *A* Deſcription *of* Needles *made for Operations on the* Eyes, *and of ſome* Inſtruments *for the* Ears, *by the Same.*

THE firſt differs from a common Couching-needle, [TAB. VII. *Fig.* 3.] in this, that it is made of Two Pieces of Steel ſoldered together, and fixed in a Handle [*Fig.* 4.]: At a little Diſtance from the Handle they ſeparate, and have; in each *Lamina*, a Button fixed, which paſſes through a Hole in the other; from this Part to the Points, they are ſo nicely applied, and poliſhed together, that they cut, and have the Shape of a common Needle: Upon preſſing the Buttons, the Points are ſeparated, and in the Inſide of the broad Part of the Points are ſeveral ſmall Indents, to prevent any thing from ſlipping, after it has once got hold.

The Uſe of this Needle is, either to depreſs a Cataract; or, if it ſhould be found of ſuch a Nature as to bear to be taken hold of, then, by opening the Points, to engage it, and carefully bring it out of the Eye.

If it ſhould happen, that in depreſſing the Cataract, or in bringing it out of the Eye, ſome of the ſmall Veſſels are wounded, and ſome Drops of Blood diffuſe themſelves in the aqueous Humour; this ſecond Needle [*Fig.* 5.] is made with Deſign to remedy this Inconveniency.

It